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09/880,019	06/14/2001	Norman G. Anderson	41777	7181

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EXAMINER

CHIN, CHRISTOPHER L

ART UNIT

PAPER NUMBER

1641

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DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/880,019

Applicant(s)  
Anderson

Examiner  
Chris Chin

Art Unit  
1641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Oct 27, 2003
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 46-54 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 46-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 and 6 6) ☐ Other:

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## **DETAILED ACTION**

### ***Election/Restriction***

1. The restriction requirement is withdrawn. Claims 1-9 and 46-54 are pending.

### ***Claim Rejections - 35 U.S.C. § 112***

2. Claims 1-9 and 46-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is vague and indefinite. In line 3, the recitation of “substantially” is not clear if the agents of interest are immobilized on the length of fibers or not.

Claim 6 is vague and indefinite because it is not clear as to what constitutes “most of the fibers”.

Claim 46 is vague and indefinite. The claim is not clear as to what constitutes “a detectable number of a single agent of interest”. The claim is also confusing because the first four lines of the claim and line 7 suggest a single agent of interest in or on each fiber but line 6 requires at least two agents of interest in or on each fiber.

Claim 47 is vague and confusing as it is not clear as to what “the other agent of interest” is, i.e. lack of antecedent support.

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Claims 53 and 54 are vague and indefinite. The claims are not clear as to what constitutes "a detectable number of the agent of interest".

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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4. Claims 1-9, 46-50, 53, and 54 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 and 46-50 of copending Application No. 10/061,969. Although the conflicting claims are not identical, they are not patentably distinct from each other because copending 10/061,969 claims a fiber bundle and fibrous structure with essentially the same limitations as the instantly claimed fiber bundle and fibrous structure.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 1-9, 46-50, 53, and 54 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 and 46-50 of copending Application No. 09/774,794. Although the conflicting claims are not identical, they are not patentably distinct from each other because copending 09/774,794 claims a fiber bundle and fibrous structure with essentially the same limitations as the instantly claimed fiber bundle and fibrous structure.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1-9, 46-50, 53, and 54 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 114-130 of

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compending Application No. 09/482,460. Although the conflicting claims are not identical, they are not patentably distinct from each other because compending 09/482,460 claims a fiber bundle and fibrous structure with essentially the same limitations as the instantly claimed fiber bundle and fibrous structure.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 U.S.C. § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

8. Claims 1, 3, 6, 8, 9, 46, 47, 49, 53, and 54 are rejected under 35 U.S.C. 102(e) as being anticipated by Stimpson.

Stimpson (U.S. Patent 6,037,186) discloses an array and method for making the array.

The disclosed invention forms elements for the construction of two dimensional (X-Y) arrays by

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synthesis or applications of binding agents in a third or Z dimension. The invention is based on the observation that arrays cut from bundles of porous rods or spiral wound porous sheets behave like membranes composed of said porous materials and conduct flow through the multitude of edges exposed during cutting. In one embodiment, the elements of the array are formed by the ends of rods of porous materials which are compatible with a chemical synthesis or compound application step. For application of proteinaceous (i.e. antibodies) or nucleic acid compounds, the porous matrix can be selected from any of the materials currently used to produce microporous membranes by a phase inversion or a leaching process. In each case, rods or threads of such material can be formed from processes similar to those used in producing hollow fiber membranes or flat sheet membranes. Each rod is dipped or otherwise exposed to a unique binding agent to allow uniform attachment throughout its length (Z axis). The attachment procedure may involve simple adsorption, covalent attachment chemistries, etc. The binding agent is introduced to the array element in a batch mode, i.e. the entire rod is treated uniformly. When all array elements are available, they are formed into a rod bundle. A sheath is wrapped around the rod bundle. Each array consists of a two dimensional arrangement of rod elements with the various compounds displayed on the newly cut ends of each rod (see cols. 3-4). Various types of immunoassays, such as sandwich and competitive, can be performed on the disclosed arrays (col. 11, lines 39-67). Cutting the rods or bundles to form the arrays can be accomplished using mechanical or laser methods (col. 12, lines 11-41).

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***Claim Rejections - 35 U.S.C. § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2, 48, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stimpson.

See above for the teachings of Stimpson.

Stimpson differs from the instant invention in failing to teach 10, 100, or 500 fibers in the disclosed fiber bundle.

However, the optimum number of fibers in each of the bundles in Stimpson can be determined by routine experimentation and thus would have been obvious to one of ordinary skill in the art.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris Chin whose telephone number is (703) 308-3991. The examiner can normally be reached on Monday-Thursday from 10:00 am to 7:30 pm. The examiner can also be reached on alternate Fridays.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le, can be reached on (703) 305-3399.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

cchin/cc  
January 11, 2004

*Christopher L. Chin*  
CHRISTOPHER L. CHIN  
PRIMARY EXAMINER  
GROUP ~~1800~~ 1641